PERMIT REVIEW

TO: Tom Dilazaro
THRU: Jim Parette
FROM: Neal Elko

NORTHEASTERN REGION:	Luzerne County
PERMIT NUMBER:	40-328-003
COMPANY NAME:	UGI Development Co.
SOURCE:	Single Cycle Gas Turbine
AIR POLLUTION EQUIPMENT:	
LOCATION:	Hunlock Twp. Luzerne County

THE COMPANY HAS SUBMITTED THE FOLLOWING DOCUMENTATION AS REQUIRED FOR THE PLAN APPROVAL APPLICATION TO BE COMPLETE:

1. A completed/updated Air Pollution Control Act Compliance Review Form dated 11-10-99.
2. Municipal notification received by the host municipality on 11-8-99 as required by Act 14.
3. Municipal notification received by the Host County on 11-5-99 as required by Act 14.
4. A check in the amount of $1200 consistent with New Source Review.
5. The General Information Form was submitted as a part of the application on 11-10-99.

THE FOLLOWING ACTIONS HAVE BEEN TAKEN BY THE DEPARTMENT:

1. An Acknowledgment letter was sent on 11-18-99.
2. Coordination with other agencies was done by the Form 1 dated 12-1-99 and was not required.
3. An Administrative Completeness letter was sent on 12-2-99.
4. Notification in the Pennsylvania Bulletin on 12-4-99 to allow an additional 30 day comment period for the public to respond.

GENERAL INFORMATION:

The company has submitted an Air Quality application for the installation of a single cycle, natural gas fired turbine at their facility located in Hunlock Township, Luzerne County.

PROCESS ANALYSIS:

The simple cycle gas turbine (source 001) to be installed by UGI is manufactured by General Electric, model LM 6000 PC. The unit will have a maximum rated heat input of 356 MMBTU/hr and can generate 41 megawatts of power. The turbine will fired natural gas with water injection for NOx control and will be used for peak power generation.

The facility plans to use water injection to satisfy BAT requirements for NOx. This will insure that the NOx emissions from the new unit be below 25 ppm corrected to 15% O2. The new unit will be limited to 1850 hours/year.

The facility plans to use efficient combustion controls to satisfy BAT requirements for CO. This will insure that the CO emissions from the new unit be below 25 ppm corrected to 15% O2. The new unit will be limited to 1850 hours/year.

The facility plans to use efficient combustion controls to satisfy BAT requirements for VOCs. This will insure that the VOCs emissions from the new unit be below 3 ppm corrected to 15% O2. The new unit will be limited to 1850 hours/year.

The facility plans to use clean burning fuels to satisfy BAT requirements for PM10. The new unit will be limited to 1850 hours/year.

With the installation of the new turbine, the NOx emissions from the facility will increase by 37.9 TPY for the facility. The installation will be not trigger NSR or PSD limits of 40 TPY increase.

With the installation of the new turbine, the CO emissions from the facility will increase by 51.8 TPY for the facility. The installation will be not trigger the PSD limit of 100 TPY increase.

ACTUAL EMISSIONS:

Pollutant	Emissions (lbs/hr)*	Emissions (TPY)*
NOx (as NO2)	41.0	37.93
SO2	2.5	2.31
PM10	3.0	2.31
CO	56.0	51.8
VOC	5.0	4.63

* Emissions listed above are based on annual operating hours of 1850 hrs/year (12-month rolling sum)

This source is not subject to NSR, PSD, NESHAPS, MACT, Air Toxics, or LAER. Also, the unit is not subject to 123.11(a)(2) or 123.22(a)(1) since it meets BAT requirements which are more stringent.

REGULATORY ANALYSIS:

This source is subject to NSPS, Subpart GG.

This source is subject to 123.41 for opacity.

SPECIAL CONDITIONS:

The new turbine (source 001) shall be limited to 1,850 annual operating hours.

The facility shall install CEMs to monitor NOx and O2 emissions.

The NOx emissions shall not exceed 25 ppm (corrected to 15% O2)

RECOMMENDATION:

The application is to be approved.